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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,600	01/21/2004	Ichiro Matsuyama	1232-5255	5048

27123 7590 02/23/2007
MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER

UHLENHAKE, JASON S

ART UNIT	PAPER NUMBER
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2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/762,600

Applicant(s)

MATSUYAMA, ICHIRO

Examiner

Jason Uhlenhake

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 recites the limitation "said warning means" in lines 3-4 of the fourth paragraph of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 33 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are drawn to a computer program per se. A computer program per se is abstract instructions. Therefore, a computer program is not a physical thing (product) nor a process as they are not "acts" being performed. As such, these claims are not directed to one of the statutory categories of inventions (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (signals or carrier waves)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26,29,30,32,34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irizawa et al (U.S. Pub. 2003/0085956) in view of Ohtsuka et al (U.S. Pat. 6,145,950), and Hayashi (JP 11001647A).

Irizawa discloses:

- ***regarding claims 26, 29, 30, 32, 34-35***, a printing apparatus capable of printing an image on a plurality of types of printing media by selectively using a plurality of types of inks including a pigment ink and dye ink (Paragraphs 0013, 0017, 0024, 0043); a discrimination portion for discrimination whether the type of said ink used for printing the image is said pigment ink or said dye ink (Paragraphs 0013, 0017, 0024, 0043)

- ***further regarding claims 26, 29, 30, 32, 34-35***, a storage portion for storing information indicating applicability relations between different types of inks and different types of printing media, a printing medium having the applicability relation with said pigment ink but not having the applicability relation with said dye ink, and printing medium having the applicability relation with said dye ink but not having the applicability relation with said pigment ink (Paragraphs 0013, 0024, 0079, 0087)

Irizawa does not disclose expressly the following:

- ***regarding claims 26, 29, 30, 32, 34-35***, type of printing media including a printing medium having the applicability relations with both pigment and dye ink; a display portion displaying a plurality of types of printing media
 - display control means for controlling display portion, on the basis of information indicating the type of said inks discriminated by discrimination portion and information stored in storage portion, to display the type of printing medium having the applicability relation with the type of ink discriminated by discrimination portion
 - a selection portion for selecting, from among two or more types of printing media displayed by display portion, the type of said printing medium used for printing displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step;
 - two or more types of printing media are displayed which having the applicability relation with the type of ink discriminated by discrimination portion, and the type of printing medium is not displayed which having no applicability relation with the type of ink discriminated by discrimination portion

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Hayashi discloses:

- ***regarding claims 26, 29, 30, 32, 34-35***, type of printing media including a printing medium having the applicability relations with both pigment and dye ink; a display portion displaying a plurality of types of printing media (Abstract), for the purpose of realizing a good image on both plain paper and a recording medium for only ink jet recording

Ohtsuka discloses:

- ***regarding claims 26, 29, 30, 32, 34-35***, a display portion displaying a plurality of types of printing media (Column 20, Lines 39-52; Column 21, Lines 7-1); display control means for controlling display portion, on the basis of information indicating the type of said inks discriminated by discrimination portion and information stored in storage portion, to display the type of printing medium having the applicability relation with the type of ink discriminated by discrimination portion (Column 20, Lines 39-52; Column 21, Lines –13), for the purpose of reducing errors in the selection process by the user

- a selection portion for selecting, from among two or more types of printing media displayed by display portion, the type of said printing medium used for printing displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step (Column 4, Lines 22-38; Column 20, Lines 39-52; Column 21, Lines 7-13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium

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- two or more types of printing media are displayed which having the applicability relation with the type of ink discriminated by discrimination portion, and the type of printing medium is not displayed which having no applicability relation with the type of ink discriminated by discrimination portion (Column 4, Lines 22-38; Column 20, Lines 39-52; Column 21, Lines 7-13), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Ohtsuka and Hayashi into the device of Irizawa, for the purpose of realizing a good image on both plain paper and a recording medium for only ink jet recording and selecting an appropriate combination of a type of output image, ink and a print medium

Claims 27, 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irizawa et al (U.S. Pub. 2003/0085956) in view of Ohtsuka et al (U.S. Pat. 6,145,950), and Mizutani (U.S. Pat. 5,774,146).

Irizawa discloses:

- ***regarding claims 27, 31, 33***, a discrimination portion for discriminating the type of said printing material used for printing of the image (Paragraphs 0017, 0043); a storage portion for storing information indicating applicability relations between different types of said printing materials and different types of said printing media (Paragraph 0079)

Irizawa does not disclose expressly the following:

- **regarding claims 27, 31, 33**, a display portion for displaying all the types of printing media useable in printing apparatus; displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step
- a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing
- warning means for issuing a warning when the type of said printing medium selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion
- determining means for determining the type of the printing medium, as a printing medium to be used for the printing

Ohtsuka discloses:

- **regarding claims 27, 31, 33**, a display portion for displaying all the types of printing media useable in printing apparatus (Column 20, Lines 39-52; Column 21, Lines 7-13); displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13),
- a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing (Column 4, Lines 22-38; Column 20, Lines 39-52; Column 21, Lines 7-13), for the

purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- warning means for issuing a warning when the type of said printing medium selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion (Column 3, Lines 63-67), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium

Mizutani discloses:

- ***regarding claims 27, 31, 33***, determining means (Figure 2, D) for determining the type of the printing medium, as a printing medium to be used for the printing (Abstract; Column 2, Lines 37-50), for the purpose of producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Ohtsuka and Mizutani into the device of Irizawa, for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium and producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Irizawa et al (U.S. Pub. 2003/0085956) in view of Ohtsuka et al (U.S. Pat. 6,145,950), Mizutani (U.S. Pat. 5,774,146), and Hayashi (JP 11001647A).

Irizawa discloses:

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- **regarding claim 28**, information processing apparatus connect to a printing apparatus capable of printing an image on a plurality of types of printing medium by selectively using a plurality of types of inks including a pigment ink and a dye ink (Paragraphs 0013, 0017, 0024, 0043, 0142)
- an input portion for inputting the type of ink used by the printing apparatus (Abstract, Paragraph 0079)
- a storage portion for storing information indicating applicability relations between different types of inks and different types of printing media, a printing medium having the applicability relation with said pigment ink but not having the applicability relation with said dye ink, and printing medium having the applicability relation with said dye ink but not having the applicability relation with said pigment ink (Paragraphs 0013, 0024, 0079, 0087)

Irizawa does not disclose expressly the following:

- **regarding claim 28**, type of printing media including a printing medium having the applicability relations with both pigment and dye ink; a display portion displaying a plurality of types of printing media
a display portion for displaying all the types of printing media useable in printing apparatus; displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step
- a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing

- warning means for issuing a warning when the type of said printing medium selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion

- determining means for determining the type of the printing medium, as a printing medium to be used for the printing

Hayashi discloses:

- ***regarding claims 26, 29, 30, 32, 34-35***, type of printing media including a printing medium having the applicability relations with both pigment and dye ink; a display portion displaying a plurality of types of printing media (Abstract), for the purpose of realizing a good image on both plain paper and a recording medium for only ink jet recording

Ohtsuka discloses:

- ***regarding claims 27, 31, 33***, a display portion for displaying all the types of printing media useable in printing apparatus (Column 20, Lines 39-52; Column 21, Lines 7-13); displaying reference information for selecting the printing medium on which the image is printed on the basis of the type of ink discriminated by the discriminating step (Column 4, Lines 22 – 38; Column 20, Lines 39 – 52; Column 21, Lines 7 – 13),

- a selection portion for selecting, from the plurality of types of printing media displayed by display portion, the type of printing medium used for printing (Column 4, Lines 22-38; Column 20, Lines 39-52; Column 21, Lines 7-13), for the

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purpose of selecting an appropriate combination of a type of output image, ink and a print medium.

- warning means for issuing a warning when the type of said printing medium selected by said selection portion does not have the applicability relation stored in said storage portion with the types of said printing material discriminated by the discrimination portion (Column 3, Lines 63-67), for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium

Mizutani discloses:

- ***regarding claims 27, 31, 33***, determining means (Figure 2, D) for determining the type of the printing medium, as a printing medium to be used for the printing (Abstract; Column 2, Lines 37-50), for the purpose of producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Ohtsuka and Mizutani into the device of Irizawa, for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium and producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Ohtsuka, Mizutani, and Hayashi into the device of Irizawa, for the purpose of selecting an appropriate combination of a type of output image, ink and a print medium and producing a print output of a high contrast and high color reproducibility onto any kind of print papers.

Response to Arguments

Applicant's arguments with respect to claims 26-35 have been considered but are moot in view of the new ground(s) of rejection.

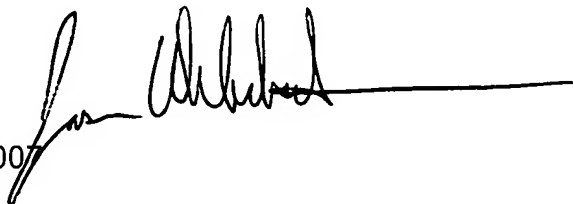
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSU
February 16, 2007



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER